



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,348	08/20/2003	Stephen R. Nolan	GP-302686	5872

7590 06/08/2005

LAURA C. HARGITT
General Motors Corporation
Legal Staff, Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,348

Applicant(s)

NOLAN, STEPHEN R.

Examiner

George P. Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1742

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by any of Locke (U.S. Patent 3,848,104), Vetsch et al. (U.S. Patent 4,459,458), or Folger et al. (U.S. Patent 4,879,448).

All of the above patents disclose a process that includes providing some type of controlled tooling, a laser, and a metal part, moving one of the laser or the metal part relative to the other, and powering the laser so that the metal part (or at least a portion thereof) is heat treated during such movement. Thus, the Locke, Vetsch et al., or Folger et al. patents are held to fully meet the limitations as defined in the instant claims.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being obvious over Locke, Vetsch et al. or Folger et al.

Locke, Vetsch and Folger all describe mounting the laser or metal part upon movable structures in such a manner that one or both of these components will move relative to the other during the process as set forth in item no. 2 supra, in a manner consistent with the instant

claims. None of these references specifically describe using a robot in conjunction with such a movable structure. However, the means by which motion is controlled in the prior art is functionally equivalent to that which would be performed by a robot, i.e. the metal part or the laser beam is guided in a specified path in the x- and y- axes, the path being coordinated so that the laser beam acts upon the desired section of the metal part for an appropriate amount of time. See Locke column 9, Vetsch columns 4-6, or Folger column 5, line 45 to column 6, line 18. It would have been obvious for one of ordinary skill in the art to employ a robot for such a task in order to obtain precise controls related to time, temperature and treatment path not readily obtainable by purely mechanical means of movement. Thus, the disclosures of Locke, Vetsch et al. or Folger et al. are held to establish a prima facie case of obviousness of the presently claimed invention.

5. Claims 2-5 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke, Vetsch et al., or Folger et al., any one of which in view of SU Abstract 1806884.

None of Locke, Vetsch et al., or Folger et al., described supra, disclose providing a metal sheet panel having an flange with a radial bend and annealing the bend portion as required by the instant claims. However, in all of these patents, the precise shape of the material being treated is not critical, and indeed the prior art suggests treatment of materials having a variety of shapes. Note particularly Locke column 8, lines 27-65 or Vetsch column 6, lines 51-59. The SU Abstract indicates that it was known in the art, at the time of the invention, to laser anneal a flange portion of a metal blank. Based on this disclosure of SU '884, performing the processes of Locke, Vetsch et al., or Folger et al. upon the particular material shapes as presently claimed would have been considered well within the level of one of ordinary skill in the art.


Art Unit: 1742

6. The remainder of the art cited on the attached PTO-892 form is of interest. This art is held to be no more relevant to the claimed invention than the art as applied in the rejections, *supra*.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1742

GPW
June 2, 2005